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ABSTRACT

Implementation of the Entry Level Skills Program (ELSP) during 1979-80 at Huston-Tillotson College and Wiley College, both historically black institutions in Texas, is described. The ELSP, which is a developmental program for freshman students who have not acquired the full range or level of cognitive skills needed for college, is part of the Developmental Research Project, which is designed to provide an improved learning system, a management information system, an appropriate test package, and a monitoring and evaluation system. Overall, the project was designed to provide professionals, and particulary women and minorities at the postdoctoral and predoctoral levels, the opportunity to design and implement the evaluation research component of the ELSP. The competency-based skills program is based on the planning, management, and evaluation systems concept to instruction. In addition, the program addresses testing concerns, and the study design includes administration of a standardized pre- and posttest battery and a series of criterion-referenced tests (e.g., the Comparative Guidance and Placement Program battery). The Institute for Services to Education Demographic/Psychosocial Scale and the Faculty and Administrator Survey form were also administered. Information is provided on student and faculty characteristics at the two pilot schools, student performance on reading and written English expression, performance on criterion-referenced tests in English and biology, results of item analyses of mastery tests, and results of faculty critiques of the programs in math and biology. Brief recommendations regarding the English tests (including reexamining items on the mastery test), the study survey guide, reporting forms,

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PROGRESS REPORT ON ELSP PROGRAM 1979-80

Presented at Summer Conference Dillard University
New Orleans, Louisiana, 1980

INTRODUCTION

The Entry Level Skills Program (ELSP) is a developmental program for freshman students who have not acquired the full range or level of cognitive skills required for a successful postsecondary educational experience. The program is in its exploratory stages. The present report is the second review and analysis in collaboration with two historically black institutions -- Huston-Tillotson and Wiley Colleges (Texas). The developmental study is entitled The ELSP Developmental Research Project (DRP). DRP is designed to generate data regarding the following critical features of ISE's Competency based elementary level skills program (C-BELS):

- goals and objectives
- curriculum materials
- instructional strategies
- data collection, analysis, and reporting systems
- student performance
- criterion-referenced test batteries
- other instrumentation

The present progress report covers the period August 1979-July 1980 and describes the procedures, and results from the implementation of the program. A section of the report is devoted to an examination of the various problems encountered during the

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year and recommendations for implementation of the program in academic year 1980-81.

DEVELOPMENTAL RESEARCH PROJECT PROCEDURES

The methodology used in the conduct of the DRP is the case study. The design also includes the administration of the Comparative Guidance and Placement test battery as a pre- and posttest of student achievement, and a series of criterion referenced tests for diagnosis and prescription within each discipline.

Implicit in the nature of the pilot study is a two-pronged approach to implementation: a Local Development Research Effort and a Cross Institutional Research Effort.

The Local Development Research Effort is designed to support the primary objective of ELSP, which is to facilitate instructional decision making in the classroom. The activities include facilitating and documenting a review and critique of the following critical program features:

- Criterion Referenced Tests
- Instructional materials (student and faculty)
- Management Information System
- Administrative Structure

The Cross-Institutional Research Effort refers to the administration of the standardized battery and to the following survey instruments which provide demoographic and psychosocial information on students, faculty and administrators:

- The ISE Student Assessment
- Faculty and Administrators' Attitude Survey
- Student Course Evaluation

An exploratory study in nature, the DRP is designed to provide, on a reiterative basis, guidance for producing an improved ELSP with proven validity.

Expected Outcomes

The primary expected outcome of the DRP is an improved and expanded learning system which consists of a teacher's manual, syllabus, student manual for each of the discipline areas, a management information system, and appropriate test package and a monitoring and evaluation system. It is expected that this system will eventually be implemented in schools with populations similar to that of the pilot schools.

Population and Sample

The target population of the disadvantaged students in approximately 20 of the nation's 105 historically black colleges. The terminology "historically black institutions" refers to "those institutions of higher education that were founded primarily for black Americans, Negroes or Colored People, although their charters were, in most instances, not exclusionary" (Blake, et al, 1975). More specifically, most of these institutions have served black Americans for at least two decades and most are from 50 to 100 years old.

As mentioned previously the pilot study sample consists of two historically Black colleges; Huston-Tillotson and Wiley, both in Texas. Criteria for selection of these institutions included: administrative and faculty commitment to the ELSP Program, four year college status and location in the south.

Methodology

The methodology used in the conduct of the pilot study was the case study approach. Data was collected through a mix of observations and interviews. In addition, the design also included the administration of a standardized pre- and posttest battery and a series of criterion-referenced tests.

Implementation. Standardized guidelines were established and implemented to insure a core of commonality across the institutional sample. Guidelines are as follows:

- Establishment of a local task force which includes the ELSP director, faculty representatives and key administrative officials.
- Focus on verbal, analytical and critical thinking skills across the discipline areas.
- Teaching of instructional objectives included in the discipline models.
- Use of the ELSP package, including the syllabi, student manuals, recommendations regarding using supplementary materials and recycling, and the instrumentation package.
- Adherence to data collection and utilization and reporting guidelines; and
- Adherence to monitoring guidelines.

Participants were urged to document systematically all other materials, techniques, tests and procedures used.

Data Collection Techniques. A variety of instruments were used to generate the data required for validating the C-BELS program, including a faculty log, a standardized pretest-posttest battery, a series of criterion-referenced tests, detailed interview schedules, checklists, and an institutional inventory.

The faculty log is the primary tool used for documenting experiences with ELSP within each institution. Faculty were asked to use this form on a daily basis to record in detail the following kinds of information: objectives; enabling activities and materials, tests administered, including the instructions given and the time requirements; critical incidents observed; the results of the criterion-referenced tests (or other tests used), as well as the utilization of such tests; turnaround time in terms of the receipt of materials and reports and recordings; changes in instructional plans; consultant visits and workshops; and attendance/attrition data. These logs were reviewed by DRP coordinators (and the ISE Task Force) on a systematic basis and become the basis for change in curriculum materials during the Summer Conference.

Checklists were used by the DRP director and the ISE Task Force in monitoring the project. The purpose of these checklists is to capture the progress which is being made in four areas of the program: instructional management; student information system development, including data flow, file maintenance and dissemination;

research and administration.

Two types of instrumentation were used to obtain performance and demographic data: a standardized pre- and posttest battery consisting of the Comparative Guidance and Placement Program battery, the ISE Demographic/Psychosocial Scale, and the Faculty and Administrator Survey Form, and criterion-referenced tests.

The Comparative Guidance and Placement Program battery consists of tests in the areas of reading, written expression, computation, applied arithmetic and elementary algebra. The ISE Student Survey investigates the relationships between students' self-concepts, their feelings about themselves and their demographic characteristics (e.g., race, age education and occupation of parents). The Faculty and Administrator Survey Form documents experiential backgrounds, responsibilities other than teaching, attitudes toward the C-BELS program; and attitudes toward disadvantaged students.

RESULTS OF THE 1979-1980 PILOT STUDY

Introduction

The results presented below emanate from the implementation of the ELSP program is the two pilot study schools in the 1979-80 academic year. Since the two schools presented similar profiles, results to be analyzed were randomly selected for each discipline area from one or another school. Also, rather than examining the results of the whole freshman class in each discipline area, the

results of a section were examined. A glance at the overall results had indicated that all sections in each discipline area appeared to have progressed in similar fashion in both schools. In analyzing the results, three major research questions were posed.

1. How valid is the ELSP Program for its student participants?
2. How effective has the program been in terms of the following two outcomes?
   (a) Overall gain in knowledge and skills in particular discipline areas
   (b) Overall gain in competency in taking standardized tests
3. How reliable are the test items and the tests themselves?

Necessarily the interpretations of the results are tentative. There are several reasons for this.

ISE did not have the time or the money to establish an extensive data base which could accommodate all the information received from the schools. Thus, no correlational or causal analysis could be undertaken.

Second, the sheer extent of the reporting system made it impossible for the schools to keep to timeliness and supply information in a timely fashion.

The first section of the results presents an analysis of faculty and student characteristics. The second section will present an analysis of the performance of participants after one academic year in the program. The last section will present an

analysis of the reliability and validity of the criterion referenced tests' items and the tests themselves.

A. CHARACTERISTICS OF FACULTY AND ADMINISTRATORS

The faculty and administrators survey was administered to all faculty and administrators in the two colleges who were directly or indirectly involved with the ELSP Program, 1979-1980. Since the total number of such persons was only 18, the data from the two schools were combined. The purpose of the survey is to provide the evaluation team of the ELSP Program with background information on the staff of the two institutions who were actively involved in the implementation of the pilot program. Questions concerning faculty attitudes and perceptions of the ELSP Program, teaching experience, experience with various teaching practices and research and evaluation were presented to the 15 faculty members in the two institutions. Our findings for the 1979-1980 academic year are as follows:

The median age of the respondents was 54.3 years, with 56% over 50 years old. Eighty-nine percent of the respondents were black and 6% were white.

Thirty-nine percent of the respondents reported that they held terminal degrees, while 56% indicated that they held Masters degrees in either the sciences or the arts. Only one respondent reported not having an advanced degree. The majority of the respondents reported that they had had previous teaching experience at the college and university level -- 83%. Only one reported no previous work experience.

The present faculty's involvement with ELSP, indicates that the greater percentage had participated in the program long enough to have a fair understanding of its philosophy and goals. Fifty-three percent of the respondents reported more than two years involvement with the ELSP program. This fact was emphasized by the fact that 83% of the respondents had a fairly clear understanding of the process, philosophy and goals of ELSP.

There was some indication that a small but significant number of faculty were concerned about the increase in work load occasioned by the implementation of the Program; 28% of the respondents reported that the work load was excessive. There appeared to be a correlation between those respondents who indicated that their participation in the program was mandatory and those who felt that the work load was excessive.

The faculty of both schools appeared to have been greatly involved in the planning and orientation sessions of the ELSP Program. Seventy-eight percent of the respondents reported having participated in some form in the planning and orientation phases. Of these, 83% participated in pre-Summer Conference planning at the institutional level, and 75% reported participation at the summer conference. The level of participation at post-summer conference was considerably less at both institutional and ISE personnel level. Only 11% participated at the post-conference planning at Dillard, and 39% at post-conference planning and institutional level. Only four respondents reported that they had not participated at any conferences or meetings.

Overall, the average faculty member in the two institutions appears to be well oriented to the goals and philosophy of the ELSP program and to be in agreement with most of them and with the process being used for their implementation. However, there appeared to be some disagreement over the types of instructional materials used and with some of the procedures.

In general the findings may be summarized as follows:

- ELSP faculty and administrators are predominantly black.
- Almost all ELSP staff hold at least one advanced degree.
- Almost all ELSP faculty have had previous teaching experience at the university/college level, and are experienced in development/remedial education, as well as in some areas of curriculum design, evaluation and research.
- Most ELSP faculty have participated in at least one of the orientation and planning seminars of the program.
- Finally, most ELSP faculty are oriented toward the philosophy and goals of the program, have a clear understanding of them and somewhat agree with both the goals and philosophy as well as the process for their implementation.

B. STUDENT CHARACTERISTICS

The ISE assessment was administered to all freshmen students at the two colleges. The questionnaire consists of 73 questions

designed to characterize the student in terms of socio-economic background, self-concept variables and attitudes toward various academic subjects.

The responses of 207 students (representing the two schools) were analyzed. The results of this analysis are presented below.

On the whole, the student sample of ELSP appears very similar in sex, age and racial composition to the population that normally attends the Historically Black College. The group is 36 percent male and 64 percent female. Blacks make up 90 percent of the sample group, and the valance contains foreign students, American whites and other ethnic minorities. Only 5% of the students are 21 years old or older; the rest are between 16 and 20 (See Table 1).

A primary objective of ELSP is the reduction of attrition; therefore, one section of our analysis focused upon factors which are generally pivotal in whether a student persists or drops out.

One such factor is, of course, financial resources. In this area, the C-BELS population did not fare well. While 44 percent of the students reported a family income of $15,000.00 or more, a significant 40 percent of the group reported their families incomes to be below $5,999.00 per year which is at poverty level. Astin (1975) reports that his findings and those of others confirm a strong relationship between family income and rates of attrition. Table II shows that on the average, 31% of the students who report a family income below $4,000 are going to drop out. The figures range from 24-29% for those in income categories between $4,000 and $15,000.

TABLE 1

COMPARISON OF 1979 - 80 AND 1978 -79 ELSP STUDENTS AT TWO PILOT SCHOOLS ON SELECTED VARIABLES

Variables	1978-79 N = 368 %	1979-80 N = 207 %
SEX		
Male	49	36
Female	51	64
AGE		
16 -20	70	95
Over 21	30	5
PARENTAL INCOME		
15,000 and above	24	44
Below 5,999	50	40
PARENTAL OCC.		
Domestic and unskilled labor	55	45
Official and Professional	10	13
RACE		
Black	85	90
Other	15	10

TABLE 2

Family Income as Related to Dropout Rates	Drop Out Rates %
Less than $4,000	31%
4,000 - 5,999	29
6,000 - 7,999	27
8,000 - 9,999	27
10,000 - 14,999	24
15,000 - 19,000	23
20,000 - 24,000	16
25,000 - 29,999	18
30,000 or More	14

SOURCE: Astin, Alexander W., Preventing Students from Dropping Out; Washington; Jossey - Bass Pub., 1975, p. 35.

A comparison was made between the first participants in the ELSP pilot study (1978-79) and the present participants, to determine if the assumptions under which the ELSP was designed and implemented were valid for the present population. Table 3 presents the results. The comparison indicated that there was great similarity between the two groups. This appeared to indicate that the ELSP program was equally valid for the present participant population. One section of the student assessment instrument required students to rate themselves on a number of issues. This was in order to measure students' expectations and self-concepts both about themselves and their academic ability. The results indicated that on the whole the ELSP participants had a realistic and positive self-concept of their ability and the skills which they had acquired, prior to entering college.

Table 3 presents a summary of student responses to selected items.

Table 3

Selected affective characteristics of ELSP students 1979-80 (N=207)

Characteristics	Percent
A. Objectives Considered very important:	
be an authority in my field	30
raise a family	5
be successful in business	28
B. Student self rating on:	
(1) School achievement	
superior	5
above average	23
average	67
below average	2
no response	3
(2) Intelligence	
superior	7
above average	31
average	57
below average	1
no response	4
(3) Qualitative and quantitative skills	
superior	3
above average	17
average	66
below average	5
no response	9

C. STUDENT PERFORMANCE ON ELSP 1979-1980

CGP PRE AND POST TEST (Reading and Written English Expression)

The performance of 100 students in the reading and written english expressions sections of the CGP were examined. The CGP was administered as a pretest at the beginning of the academic year (August 1979). The post test was administered at the end of the academic year (May 1979), after two semesters of the ELSP. The results of the reading pretest indicated that 71 of the 100 students scored at or below the 20th percentile and 95 were below the 50th. Only 5 of the students scored above the 50th percentile. Of the 95 students who were at or below the 20th percentile, 50 were below the 10th percentile. In other words, the pretest revealed that more than half the freshman class were below the 10th percentile in reading skills. This is particularly alarming when it is considered that the CGP is geared to the 6th grade level and above in reading skills. Thus it can be estimated that 50% of the freshmen class were reading at or below 6th grade level. Post test CGP was administered at the end of the school year and the following results were obtained for the same group of 100 students. There was an obvious improvement overall. As compared with 59 students who had been below the 10th percentile in the pretest, only 22 students now appeared to be below that level. This was a significant gain. Even more significant was that 24 students now scored above the 50th percentile, when compared to only 5 in the pretest. (Table 4). The students were then divided into low and high groups, and their pre and post test standard score examined. A t test was performed to determine if there was a significant difference between the pre-post-test means of each group. The results indicated a

significant difference: for the low group t=11.20, significant beyond d=.001 dt 24 and for the high group t=1.62 significant at d=.1 dt 24. It was concluded that the ELSP program had made a difference. Participants appeared to have gained 3 grade years on the average during the academic year.

TABLE 4

DISTRIBUTION OF PERCENTILE RANKS OF 100 STUDENTS BEFORE AND AFTER TWO SEMESTERS OF ELSP PROGRAM
CGP READING.

Percentile Rank	Before	After
Above 50	5	24
41 - 50	4	7
31 - 40	7	15
21 - 30	9	12
11 - 20	16	12
1 - 10	59	22

Similar analysis was conducted on the performance of the participants in the written English expression section of the CGP. Comparable results were obtained (Table 5).

TABLE 5

DISTRIBUTION OF PERCENTILES RANKS OF 97 STUDENTS BEFORE AND AFTER TWO SEMESTERS OF ELSP PROGRAM CGP WRITTEN ENGLISH EXPRESSION

Percentile Rank	Before	After
Above 50	12	20
41 - 50	2	4
31 - 40	5	9
21 - 30	13	22
11 - 20	16	22
1 - 10	49	20

Seventy-five percent of the students scored at N below the 10th percentile on the CGP administered before ELSP program, of these, only 22% scored below the 10th percentile on the post test. An equally significant difference was observed with those scoring above the 50th percentile at the pretest only 5 of the 100 students scored at this level. At the post test, this number increased by 19 to 24.

A similar division of the participants into low and high groups was undertaken. The analysis of pre and post-test means indicated significant difference for the low group. No difference in pre and post-test performance was observed for the high group.

However, a slight improvement was indicated when an examination of individual scores was made. The results again indicated that the ELSP appeared to have made a difference in the performance of the participants (Tables 6 and 7).

TABLE 6

Distribution of Standard Scores of High Group* Before and After Two Semesters of ELSP. N = 15

CGP Written English Expression

Standard Score	Before	After
61 - 65	2	2
56 - 60	0	7
51 - 55	9	1
46 - 50	3	3
41 - 45	1	2

Pretest X=52.53 s=8.5 Posttest X=53.80 s=8.53

t=.95 df 14

Performance on the Criterion Referenced Tests (CRT)

Before the program was implemented, students were administered a CRT Mastery Test in each discipline area. The same test was administered at the end of the program, to determine the extent to which the program had led to an improvement in the skill level of the participants.

TABLE 7

DISTRIBUTION OF STANDARD SCORES OF LOW GROUP N=24 ON CGP WRITTEN ENGLISH EXPRESSION BEFORE AND AFTER 2 SEMESTERS OF ELSP

Standard Score	Pretest	posttest
46-50	0	2
41-45	0	7
36-40	0	7
31-35	15	7
26-30	6	1
21-25	3	0

Pretest X = 29.96 SD = 9.5

Post test X = 38.29 SD = 8.7

t = 8.29 d = .001 dt 23

A significant difference was observed in the performance of the low group between the pretest before they received ELSP program and the post test. We can see that program made some of the difference observed. Before treatment, no student scored above 40 after treatment 9 or of the students scored over 40.

D. ENGLISH

Table 8 is a presentation of the Distribution of Scores on the Pre-Post Test English CRT Mastery. The scores are for 26 students in a section of the ELSP English program. A t test was

performed to determine whether there was a significant difference between the pre-post-test means. The results indicated that the participants appeared to have improved after two semesters of treatment t=4.292=.05.

However, an examination of the distribution of the pretest scores indicated that the scores appeared to be inflated and did not have any relationship with the range of scores obtained by the participants in the CGP Reading and Written Expression sections. It is suggested that the CRT items be closely examined to determine whether they were too easy and therefore not geared to the level which the students were expected to attain after treatment.

TABLE 8

DISTRIBUTION OF STANDARD SCORES ON ENGLISH CRT MASTERY BEFORE AND AFTER TWO SEMESTERS OF ELSP N = 26

Score	Pretest	Post test
86 - 90	1	2
81 - 85	1	3
76 - 80	3	6
71 - 75	4	5
66 - 70	8	5
61 - 65	2	1
56 - 60	3	3
51 - 55	0	1
46 - 50	3	0
41 - 45	0	0
36 - 40	1	0

Pretest $\bar{X}$=66.08 s=8.7 Post test $\bar{X}$=72.73 s=8.5
t=4.29* d=.05 df 25

BIOLOGY

The pre-post test scores of the total biology class were analyzed. In addition the class was divided into high and low groups. The high group were those who scored at one standard deviation above the pretest mean; the low group were those who scored less than one standard deviation below the pretest mean. Table 9 presents the distribution of scores of the total Biology class. The "E" test indicated a significant difference between pre-post test means t=8.78 d=.001. Subsequently a t test performed on the pre-post test means of the high group indicated a difference at the .05 level t=1.94. (See Table 10).

TABLE 9

DISTRIBUTION OF SCORES ON THE BIOLOGY CRT MASTERY OF 46 STUDENTS BEFORE AND AFTER 2 SEMESTERS OF ELSP

Score	PRETEST N	POST TEST
46-50	0	2
41-45	2	12
36-40	1	7
31-35	1	6
26-30	6	7
21-25	11	7
16-20	14	4
11-15	9	1
6-10	2	0

Pretest $\bar{X}$=21.43 Post Test $\bar{X}$=41.15
SD=7.9 SD=9.4
t=8.78 beyond .001 (two tailed)

TABLE 10

DISTRIBUTION OF SCORE OF HIGH GROUP
ON MASTERY BEFORE AND AFTER ELSP.
N=16 HIGH GROUP

Score	Pre	Post
46-50	0	2
41-45	2	3
36-40	1	3
31-35	1	3
26-30	6	0
21-25	6	2
16-20	0	3
	X=28.94	X=33.56
	SD=9.48	SD=10.70

Max. score = 50
Min. score = 17
t=1.94 d=.05 df=15

The greatest gains appeared to have been made by the low group. The t test yielded a t of 9.69 which was significant beyond the .001 level.

The results of the Biology CRT Mastery indicated that participants had greatly improved their knowledge and skills in Biology over the 2 semesters. It was therefore inferred that the significant charges observed were in part due to the ELSP Biology Program. (See Table 11).

TABLE 11

DISTRIBUTION OF SCORES OF LOW GROUP ON BIOLOGY MASTERY BEFORE AND AFTER ELSP N=15

Score	Pre	Post
41-45	N	6
36-40	0	2
31-35	0	2
26-30	0	2
21-25	0	2
16-20	4	0
11-15	9	1
6-10	2	0
Max. score = 50	Min. score = 7	
$\bar{X}$ = 13.33	$\bar{X}$ = 34.2	
SD = 11.95	SD = 9.98	

t = 9.69 beyond .001 two tailed

The results of the CRT pre-post mastery tests together with the gains observed in the CGP Pre-Post administration, appear to indicate that the ELSP intervention program has contributed significantly to improving the knowledge and skills level of the participants. However, further analysis of the data needs to be carried out to determine how much of the changes observed can be attributed to the ELSP Program, itself.

Analysis of CRT Items

Since the ELSP Program is still in the experimental stage, it is necessary that the tests which are designed to measure student progress within the program be analyzed to determine how valid and reliable they are. In addition, it is essential that test items be analyzed to determine their difficulty level and how well each item discriminates between the highest and lowest scores.

An item analysis was carried out on several items of the Mathematics CRT Mastery to determine their difficulty level and their discriminatory power.

The results for a randomly selected group of items are presented in Table 12. The results indicate for example that item i was too difficult for all students and therefore did not discriminate high scorers from low scorers. Item 15 is an example of a good item, in that difficulty level is about .50 and the discriminating power of the item is about .60. Item 50 would appear to be a poor item, in that the difficulty level was low .25, since the majority of both high and low scorers answered correctly and the discriminating power was also low .17

Finally an attempt was made to determine how reliable the CRT Mastery tests were. The Kuder Richardson test (K2R) was performed on the pre and post test means of each CRT mastery. The reliability coefficients ranged from .75 to .84. This indicated a high level of test reliability.

Faculty Evaluation

The analysis of the faculty critiques of the program was limited to the Math and Biology programs, since these were the only two sets received by ISE at the time of analysis.

ITEM ANALYSIS OF RANDOMLY SELECTED ITEMS
ON THE MATHEMATICS MASTERY TEST
ON THE MATHEMATICS MASTERY TEST

Item No.	P	D
1	0	0
4	.33	.67
15	.50	.66
32	.58	.16
40	.50	.66
48	.33	.66
50	.75	.17

The analysis indicated that faculty were pleased with the manuals and other instructional tools provided by ISE personnel. They found that on the whole the students progressed well under ELSP. Some concerns were voiced about the reading level of the manual, and about the need to expand practice exercises and include more information on supplementary materials. Faculty were especially concerned with the amount of paperwork they were expected to undertake during the course of implementations. The majority suggested that the workload be reduced so that more time could be spent helping the individual student. Overall, however, faculty were well satisfied with the ELSP program and found it both viable and effective. A typical faculty comment was: "This program should have been thought of a long time ago."

DISCUSSION

The goal of the present report, is to present a systematic though limited review of the processes, products, strengths and weaknesses of the ELSP (1979-1980).

The limited analysis of the ELSP Program 1979-80 presented here, indicates that the program is progressing successfully, as far as its implementation at the institutional level. Faculty appear to have followed the guidelines supplied and have routinely recorded all data from the pre-post test, CRT Mastery and interim tests for each discipline area.

An analysis of the progress of the program 1979-80 however, reveals certain problems, which need to be examined if the program is to become even more effective.

First, the amount of paperwork expected of the faculty is burdensome. There needs to be a greater simplification of the "bookkeeping" process, which will not endanger the formative aspect of the program.

Second, a true assessment of the validity and effectiveness of the ELSP cannot be accomplished until a complete data base is set up. Without such a base, correlational and causal analysis cannot be undertaken. Such analysis is necessary to allow for a better understanding of the relationship between the entering characteristics of the participants and their subsequent performance.

RECOMMENDATIONS

1. The lack of relationship between performance on the English CRT Mastery and the CGP Reading and Written English Sections, requires that the items on the Mastery test need to be reexamined.

2. The student survey guide needs to be revised to eliminate the discrepancies in student responses to related items. For example, parents' occupation and parental income.

3. The reporting forms need to be streamlined so that faculty will be required to undertake less paperwork.

4. ISE must devise a means to establish a computer data base so that more vigorous analysis of the data can be undertaken.

5. No cut-off score has yet been arrived at above which mastery can be assumed in each of the discipline area CRT mastery tests. It is suggested that analysis of pre and post test scores for the last two years be undertaken, in order that a cut-off point can be established, based on a relationship between pre-post test performance for the last two years. The establishment of cut-off scores, will allow for more effective placement of participants in the program and for more individualization of instruction.